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**TOWARD A SINGLE, INTEGRATED PLANNING & EXECUTION
SYSTEM**

**DEPLOYMENT PLANNING IN THE EXPEDITIONARY
AEROSPACE FORCE**

by

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A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

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Preface

While working in the Headquarters United States Air Force War and Mobilization Plans Division, I observed two distinct and independent Air Force deployment planning processes. While the Joint Operational Planning and Execution System (JOPES) describes a seamlessly integrated, collaborative process; the reality within the Air Force is quite different. In my opinion, during the 1999 Air War Over Serbia (AWOS), the Air Force narrowly avoided catastrophic problems directly attributable to maintaining two unrelated deployment processes. It would have been extremely difficult for planners to disengage from Balkan operations and develop transportation plans to support a Major Theater War elsewhere. This paper elaborates on the above and presents actions the Air Force can take to better support established processes.

I would like to acknowledge the assistance of my ACSC faculty advisor, Lt Col Heitmann. His critical eye kept me focused on the task I set out to accomplish. I would also like to thank the “War Dawgs” of HQ USAF/XOPW for helping this airlift pilot understand the finer intricacies of war planning. In particular, I acknowledge the unsung efforts of TSgt Glen Littlefield, the single individual whose comprehensive understanding of Joint and Air Force planning and deployment systems has helped so many people accomplish so much for so many years.

Further, I wish to thank Lt Col Ed Hatch of HQ USAF/XOPE, and Mr. Don Zimmerman. Their continued development toward a single, integrated planning and execution system (no matter what it is called) will benefit the United States Air Force well into the 21st Century.

Finally, my personal and professional thanks go to Col Robert Allardice, chief of HQ USAF/XOPE. Without his leadership and mentorship, this paper would still be an idea in a frustrated major's head.

Abstract

The Joint Operation Planning and Execution System (JOPES) is a combination of joint policies, procedures, and automated data processing (ADP) support used to plan and execute joint military operations. While JOPES defines three interrelated planning processes, circumstances of the past decade induced the Air Force to progress toward two distinct and segregated planning processes. Over time, technical and organizational disconnects had handicapped the highly structured peacetime deliberate planning process. Consequently, the Air Force planning process no longer adequately supported the dynamic environment of crisis action planning. To obtain the flexibility required to deploy personnel to small-scale contingencies and multiple rotational deployments, the Air Force developed a separate, unrelated process to perform individual rotational requirements. The inability of either system to adequately support the gradual escalation of events during the Air War Over Serbia (AWOS), and the consequent loss of situational awareness to existing Major Theater War (MTW) OPLANs, mandate a change to Air Force deployment planning and execution processes.

To meet the rapid planning and execution timelines required of an Expeditionary Aerospace Force, the Air Force must take positive actions to achieve the collaborative planning and execution system envisioned as far back as the mid-1960s. This paper elaborates on three steps required to meet this goal:

1. A formal effort to redefine existing MTW sized Unit Type Codes (UTCs) to the scaleable, modular building blocks that support rotational contingencies, crisis action and deliberate planning.

2. Once resized, link UTCs together to form Force Modules representative of the contributions of aerospace power identified in Air Force Doctrine.¹
3. Continue ongoing efforts to develop the Deliberate Crisis Action Planning and Execution Segment (DCAPES) within the Global Command and Control System (GCCS). If given proper emphasis and funding, this system has the potential to finally bring together the existing independent systems and provide detailed manpower and logistics data to planners at all levels to support CINC requirements.

These actions must be taken to enable the Air Force to meet its goal of deploying forces to create relevant effects within 48 hours after deployment initiation. Positive actions must be taken now, to ensure the functional visibility of resources required to meet our world-wide commitments.

Notes

¹ Air Force Doctrine Document 2. *Organization and Employment of Aerospace Power*, 28 September 1998, p. 12

Part 1

Introduction

We must have a force structure and deployment posture that enable us to successfully conduct military operations across the spectrum of conflict, often in theaters distant from the United States.

—October 1998 National Security Strategy

The post cold war drawdown and accompanying reduction of overseas presence have compelled the United States military to become a home-based, deployment driven force. This has placed a large burden on Unified Commander-in-Chief (CINC) staffs to plan and service components to successfully execute.

To support the reality of global engagement, the United States Air Force began an evolutionary movement to become a more Expeditionary Aerospace Force (EAF). EAF provides an adaptive response capability to employ relevant aerospace forces in the 21st Century.¹ Reduced overseas presence and decreased force structure require the Air Force to maintain a capability to rapidly deploy light, lean, yet relevant, force packages to meet worldwide CINC requirements.

This paper discusses the packaging and preparation for deployment of forces to include planning guidance described by joint doctrine and executed by Air Force planners. It will discuss disconnects of the Air Force planning systems and the consequences of these disconnects while supporting the 1999 Air War Over Serbia (AWOS). Finally, the paper will discuss actions

to streamline preparations for deploying AF capabilities supporting the Expeditionary Aerospace Force of the 21st Century.

Joint Planning Direction

Developing an executable Course of Action in response to National Command Authorities (NCA) directives is an integrated process involving multiple headquarters, commands, Services and agencies. The National Security Strategy (NSS), published by the President, initiates a process that provides guidance to assist theater CINCs.² More refined guidance comes to the CINC via the National Military Strategy (NMS), Department of Defense regional strategy reports, and numerous other official documents. These documents provide general direction in the form of policy goals and concepts.

The Chairman of the Joint Chiefs of Staff (CJCS) furnishes the NMS to the Secretary of Defense and the President. The NMS describes the Joint Chiefs of Staff (JCS) strategy using fiscally constrained force structure required to support the NSS.³ The NMS assists the Secretary of Defense in developing the Defense Planning Guidance (DPG), and guiding the CJCS in the development of the Joint Strategic Capabilities Plan (JSCP). The JSCP provides clear direction to CINCs to accomplish tasks and missions based on current military capabilities.⁴ The JSCP apportions resources to combatant commanders to develop plans, based on military capabilities. The guidance for planning, identifying, notifying, deploying and redeploying these forces falls within the Joint Operation Planning and Execution System (JOPES).

History of Joint Operation Planning and Execution System (JOPES)

The development of support for standardized joint operation planning began in the 1960s.⁵ Prior to initial restructuring, incompatible computer systems, software programs, and planning

procedures between Services and Commands impeded support to theater CINCs. Information transfer between dissimilar computer systems was mechanically difficult, frustrating, and time consuming. Moreover, the combatant commands had, over time, developed different formats for storing data to support their individual plans. Plans submitted by the combatant commanders were therefore difficult to analyze, review, approve, or relate to each other.

In 1966 the Secretary of Defense, recognizing the seriousness of these problems, directed the Joint Chiefs of Staff to develop procedures and a standardized automated data processing (ADP) system to support the new Joint Operation Planning System (JOPS). JOPS was to accomplish several things:

- foster common understanding by using **standard procedures** throughout the planning community
- give **standard formats for operation plans** that contain only the information necessary to understand and use the plans
- incorporate **standard data files and common application programs** in a system compatible with all users to allow the rapid flow of information
- permit the **identification of shortfalls early in the planning process**
- include a mechanism for **plan refinement and review**
- allow **rapid conversion of operation plans into an operation order during a crisis**⁶

JOPS procedures were updated through the years, continuing toward a standardized system for developing and documenting operation plans. However, the data generated in JOPS ADP were not readily accessible for rapid adaptation to crisis action situations, and JOPS ADP had no capability to monitor execution of an Operations Order (OPORD).⁷ To help remedy this condition, the Joint Deployment System (JDS) was developed to furnish the ADP support for increasingly time-constrained crisis action planning. Primarily intended to support crisis action planning, the JDS architecture included a time-phased force and deployment data (TPFDD) base as well as narrative data of all approved plans. The JDS bridged the gap between deliberate and

crisis planning by making the extensive efforts of deliberate planning resident in the JDS database immediately available for use in crisis action planning.

While JDS was an improvement over JOPS, the disadvantage of moving back and forth between two systems hampered effectiveness. The Defense Information Systems Agency (DISA), implemented a strategy to bring improved JOPS and JDS functions together into a single, user-friendly system--JOPES.⁸ JOPES ADP, which supports force, support, and transportation planning, remains the formal CINC planning process answering the who, what, when, and where questions about deploying forces.

Notes

¹ EAF - Expeditionary Aerospace Forces. HQ USAF/XOPE Briefing located on EAF webpage. Available protocol: Briefing. HQ USAF EAF Implementation Division (AF/XOPE). Subject: Expeditionary Aerospace Forces, 1 November 1999. Briefing available from <http://www.dtic.eaf.mil>.

² US Code 161, Title X, located at US House of Representative Web page. Available from <http://law2.house.gov/download.htm>.

³ Armed Forces Staff College Publication 1, *The Joint Staff Officers Guide, 1997*, p. 5-9

⁴ Joint Publication 5-0, *Doctrine for Planning Joint Operations*. Joint Chiefs of Staff, Washington, D.C.: United States Government Printing Office, 13 April 1995, p. II-5

⁵ Joint Publication 1-02, *Dictionary of Military and Associated Terms*, as amended online as of June 29, 1999. Available from <http://www.dtic.mil/doctrine/jel/ref.htm>.

⁶ Joint Staff Officers Guide, p. 5-26

⁷ Joint Staff Officers Guide, p. 5-26

⁸ Joint Staff Officers Guide, p. 5-27

Part 2

Planning as a Process

Be audacious and cunning in your plans, firm and persevering in their execution, determined to find a glorious end.

— Clausewitz: Principles of War, 1812

Secretaries of the military departments are responsible for the efficiency of the Services and their organization and preparedness for military operations.¹ Generally, when thinking of preparedness for military operations, efforts are focused on the readiness of aerospace forces to execute operations on the battlefield. While the effective *employment* of aerospace power remains crucial, today's Expeditionary Aerospace Force (EAF) requires greater focus on the timely world-wide *deployment* of these forces.

A CINC will determine required force size to create decisive effects at the time of execution, but during peacetime the Service prepares and presents forces properly equipped and ready to deploy. Each Service has its own process and systems for deploying forces, but at execution all must be coordinated through the established joint process, the Joint Operation Planning and Execution System (JOPES).

JOPES Process

JOPES is an ungainly acronym. It refers to both the high level process and procedures for planning and executing joint operations, as well as the databases and computer systems (JOPES

ADP) required to execute the planning and deployment process. JOPES ADP is the single source for identification, deployment/redeployment planning, and execution across the Department of Defense (DoD).² Although many organizations and agencies are involved in the JOPES community (See Figure 1), the Chairman of the Joint Chiefs of Staff (CJCS) maintains overall responsibility managing the process.³

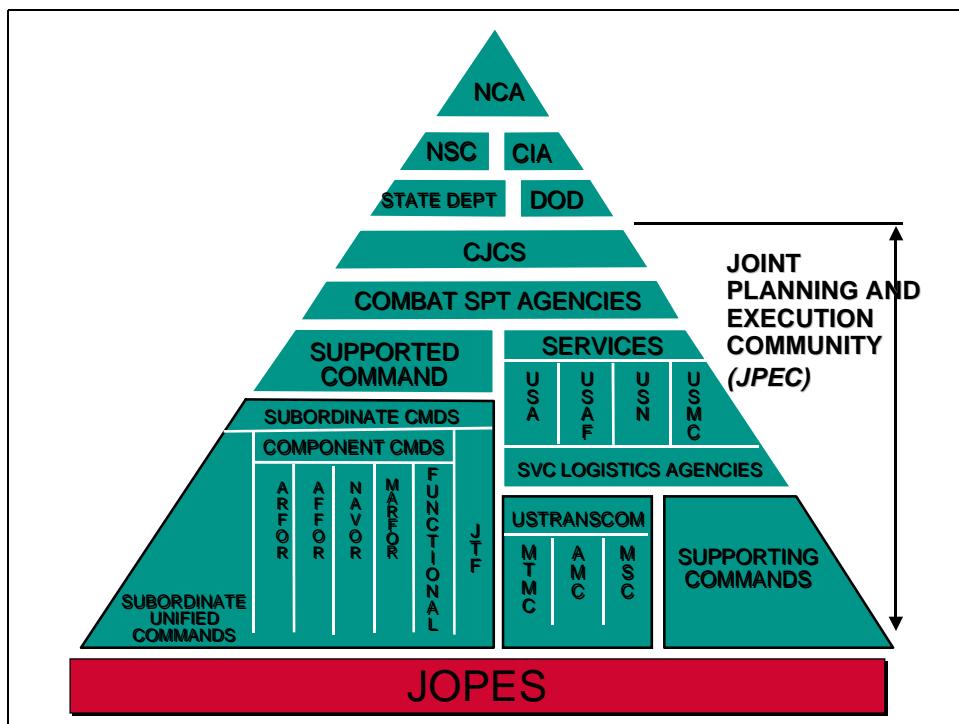


Figure 1. The Joint Planning and Execution Community⁴

Plans are proposed under different processes depending on the focus of a specific plan. JOPES presents three interrelated processes, campaign planning, deliberate planning and crisis action planning (See Figure 2), that can be used to develop a plan.

Deliberate Planning

Deliberate planning is a peacetime process to prepare for a possible contingency based upon the best available information.⁵ This process can be initiated by CINC direction or tasked via the Joint Strategic Capabilities Plan (JSCP), which provides scenarios, assumptions, and force

apportionment to the CINC. Deliberate planning is a highly structured process. The commanders and staffs of the entire Joint Planning and Execution Community (JPEC) produce fully coordinated, contingency plans detailing likely warfighting force structure and execution timelines.⁶ Once developed, these plans must be continually updated due to changes in force structure.

Deliberate planning begins when a CINC receives a task assignment, and ends when supporting plans have been approved by the supported commander.⁷ Conducted as part of the Joint Strategic Planning System (JSPS), the formal process of deliberate planning complements and supports other DOD planning cycles.⁸ For example, force requirements for key deliberate planning scenarios have historically been used as a basis for development of bottom line Air Force force structure.

The product of the deliberate planning process varies, but is dictated by CINC direction or JSCP guidance. The most detailed product of the deliberate planning process is an Operation Plan (OPLAN). An OPLAN is a complete description of the CINC's concept of operations, and demands much time and effort to produce. An OPLAN identifies forces and supplies required to execute the plan, and includes a movement schedule for resources into the theater of operations.⁹ The documentation includes annexes that describe the concept and explain the theater-wide support required in the subordinate commanders supporting plans. The detailed planning essential in OPLAN development is normally required when the military response to a hostile situation:

- is sufficiently critical to U.S. national security to justify the detail involved,
- contributes to deterring enemy aggression by showing U.S. readiness through planning,
- would tax total U.S. capability in forces, supplies, or transportation.¹⁰

Not all tasks given to CINCs require development of a complete OPLAN. In most cases the task does not require preparation of a detailed flow of resources. Though the same deliberate planning process is followed for producing Concept Plans (CONPLANS), the level of detail is abbreviated. CONPLANS are normally prepared when:

- the contingency is not sufficiently critical to national security to require detailed prior planning,
- the situation would not place unacceptable demands on U.S. resources,
- the probability of occurrence during the JSCP planning cycle is low, or planning flexibility is desired.¹¹

The objective of concept planning is to develop sound operational and support concepts, which can be rapidly expanded into an operations order (OPORD) if required.

Finally, development of a Functional Plan follows the same process used for OPLANs and CONPLANS. However, Functional Plans normally involve the conduct of military operations in a peacetime or permissive environment developed by combatant commanders to address requirements such as,

- disaster relief,
- nation assistance,
- logistics,
- communications,
- surveillance,
- protection of U.S. citizens,
- nuclear weapon recovery and evacuation, and
- continuity of operations, or similar discrete tasks¹²

The force identification and transportation time-phasing required of OPLAN (and some CONPLAN) development is accomplished in a time-phased force and deployment data (TPFDD) base. The requirement to develop a TPFDD is the most comprehensive and time consuming product of any planning endeavor.

Time-phased force and deployment data (TPFDD)

The TPFDD answers the questions who, what when where and how. The TPFDD is a database the CINC/Service Component develops to describe *what* kinds of forces are required, *when* they are to arrive in theater, and *where* they will bedown when they arrive. Force providers (MAJCOMs/FOAs/DRUs) will answer *who* will deploy by identifying units and TRANSCOM will determine *how* forces will deploy---land, sea, or air. Stated more formally, the TPFDD is the joint directed method to formally articulate force requirements and arrival schedules into a theater. The JOPES TPFDD defines collaborative planning because it is the single vehicle that can be simultaneously monitored by all members of the JPEC through JOPES ADP.

A major data element within a TPFDD is the Unit Type Code (UTC - See Figure 3). A UTC is a five-character alphanumeric code that provides detailed information associated with a particular capability. Within this five-character UTC are details of the number and type of personnel and/or equipment inherent in the generic (notional) force package. In addition, every UTC contains a narrative description of its capability and usually lists the unit related supplies required to accomplish the mission.

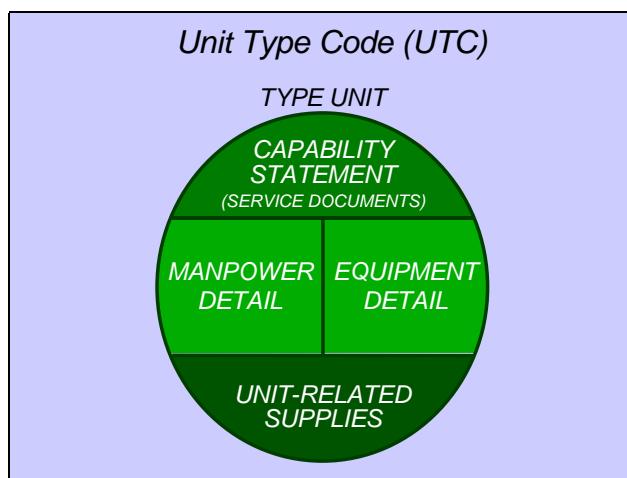


Figure 2. The Unit Type Code (UTC)¹³

During TPFDD development, if a standard UTC is in excess of required capability, planners can customize (tailor) the standard UTC to meet the actual requirement. The purpose of tailoring is to only take what is needed (light, lean) and to ensure an efficient utilization of limited transportation.

To maintain a level of standardization and decrease the amount of time developing a TPFDD, personnel and equipment can only be eliminated from UTCs, not added. Only allowing deletion of forces serves two purposes. First, mechanically speaking, it is easier to delete forces than to find and manually input the inordinate level of detail required to properly communicate personnel and equipment data. Second, if the entire Service is represented as part of deployable UTCs, than any attempt to add individual forces to a UTC would be at the expense of other UTCs, thus compromising that capability without proper representation.

Today, most Air Force UTCs are sized for Wing level deployments associated with MTWs. This amounts to very little tailoring of UTCs during deliberate planning. However, during crisis action planning, a significant amount of tailoring is required to trim large UTCs to meet todays many Military Operations Other Than War (MOOTW). This effort is complicated because existing Air Force specific systems do not support the ability to rapidly tailor standard UTCs during TPFDD development. Further, when UTCs are tailored, there is no way to track residual capability which might be available to support additional operations. Once any portion of a standard UTC is used, existing computer systems declare that force unusable. Describing details associated with these disconnects is a separate research effort, but liability falls to the stove-piped development of existing Air Force deployment systems.

During TPFDD development, the supported CINC component tailors the UTC requirement to meet specific operational needs. Once the specific requirements are elaborated in the TPFDD,

then the CINC, or Service, as appropriate, will identify the specific unit to deploy the capability (UTC). A Unit Identification Code (UIC) represents the actual unit deploying the UTC and provides the link between notional force requirement and the actual people and equipment scheduled to deploy. Therefore, each UTC/UIC combination identifies what type of force is deploying and what unit is providing the force. To ease identification of the UTC/UIC combination, each entry into a TPFDD is given a unique unit line number (ULN). A ULN represents the specific row number within the TPFDD database, much the same way as whole numbers represent row headings within any computer software database.

A complete TPFDD will contain force requirements, assigned units, deployment schedule and routing of forces.¹⁴ In addition, during deliberate OPLAN development, additional personnel and cargo not associated with unit moves will be included to provide visibility to sustainment operations.¹⁵ When combined with other ULNs and time-phased to ensure desired sequencing of forces into a theater, the Air Force component presents the CINC with the Air Force ‘slice’ of the TPFDD. The CINC combines all component ‘slices’, further refining time phasing. Once the theater CINC and providing components verify TPFDD data as accurate and transportationally feasible, the TPFDD is validated and responsibility for moving the force transfers to TRANSCOM. TRANSCOM will most likely schedule movement from a point of embarkation, to a point of debarkation, which may be in or near the theater. Although simplified in this discussion, the development of a transportationally feasible Deliberate OPLAN TPFDD may take up to two years to complete.¹⁶

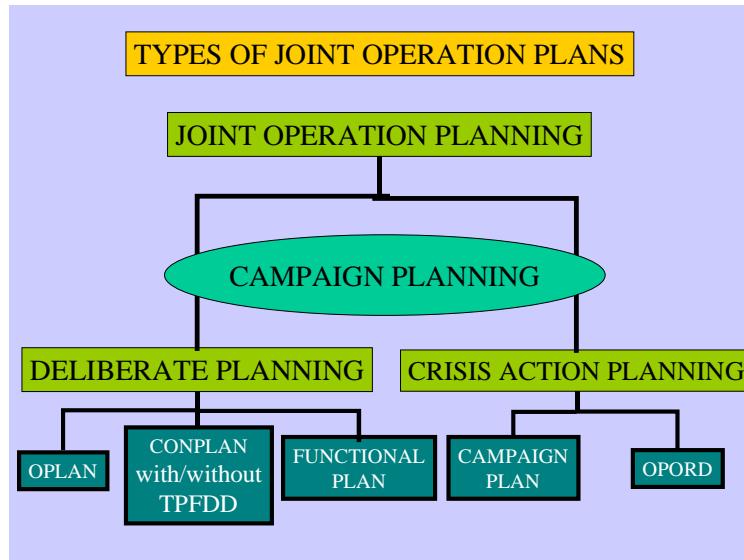


Figure 3. Types of Joint Operations Plans¹⁷

Campaign Planning

Joint Publication 5-0, Doctrine for Planning Joint Operations, states; “Plans developed during deliberate planning provide a foundation for and ease the transition to crisis resolution.”¹⁸ In theory, work performed during the deliberate planning process allows the JPEC to develop the processes, procedures, and planning expertise that are critically needed during crisis action planning.”¹⁹

Campaign planning should amount to leveraging peacetime efforts of deliberate planning to support plan development prior to or at the beginning of crisis action planning. The campaign plan embodies the combatant commander’s strategic vision of the arrangement of related operations necessary to attain theater strategic objectives.²⁰ Combatant commanders translate national and theater strategy into strategic and operational concepts through the development of theater campaign plans.²¹ Identification of forces from deliberate plans may exist to initiate campaign planning, while crisis action planning processes culminate preparations for execution

via an Operations Order (OPORD). Later, this paper will discuss how properly sized UTCs can better support campaign planning.

Crisis Action Planning

Crisis action planning (CAP) is based on current events and generally conducted in time-sensitive situations. Unlike deliberate planning where assumptions are directed, CAP uses actual circumstances existing when planning occurs. CAP procedures are more flexible to ensure the timely flow of information, and to support the rapid execution of an operation order.

The time intensive nature of deliberate planning is unacceptable when presented with a situation that requires forces to deploy immediately. Further, forces responding to pop-up contingencies are generally smaller than those represented by standard UTCs for MTW planning. For this reason, over the past ten years, the Air Force has mostly abandoned a standard UTC-based deployment for MOOTW and crisis operations less than a MTW.

Current Air Force planning systems do not possess an adequate capability to rapidly customize (tailor) standard-sized UTCs to meet actual deployment requirements. As a work-around to this problem, AF planners fabricate non-standard UTCs, and populate them with exactly the personnel and equipment required for each particular deployment. Unfortunately, to adequately identify the equipment and personnel required in the fabricated UTC, the planner must include the height, weight, volume, and national stock number for each piece of equipment, and the Air Force Specialty Code (AFSC) for each individual. Without this level of detail, Service providers do not have enough information to send the right equipment/people. Not knowing what is being sent, TRANSCOM cannot adequately schedule appropriate transportation assets.

While our planning system must maintain the ability to develop non-standard UTCs, AF Manual (AFMAN) 10-401, Operation Plan and Concept Plan Development and Implementation, clearly states, “the use of non-standard UTCs is the exception, not the rule.”²² Further, the manual states that if a non-standard UTC is utilized in a TPFDD, the requirement (to include specific details) must be forwarded for development of a standard UTC.

Today, with a smaller force already spread thin, it is imperative MAJCOM planning staffs maintain adequate visibility of resources. Every time a non-standard UTC is developed, there is a possibility that critical personnel or equipment designated for MTW OPLAN use has deployed. Further, it is very difficult for MAJCOM planning staffs to track equipment and personnel when non-standard UTCs are used. Consequently, only standardized UTCs, with critical transportation personnel and equipment detail included, can adequately support the full spectrum of planning.

Because of these difficulties working with UTCs, rotation of forces to standing deployments in Bosnia and Southwest Asia has been accomplished primarily through the deployment of individuals, not UTCs. This causes problems because MAJCOM planning staffs lose visibility of warfighting capability (i.e. UTCs) when individuals are deployed. The result is MTW sized UTCs lacking pre-planned personnel/equipment information. When this occurs, the required visibility to identify remaining force structure is lost. To realistically identify available force structure for further deployment actually requires making telephone calls to units. These problems are expanded when different organizations manage the individual personnel and UTC deployment processes.

PALACE Tenure

PALACE Tenure was the Air Force personnel deployment program managed by the Air Force Personnel Center (AFPC). AFPC managed individual augmentation support force

requirements for long-term, stable contingency operations.²³ The rapid increase of long-term contingencies throughout the 1990s resulted in AFPC managing a significant portion of all deployments with limited input from existing planning staffs.

In addition, AFPC's efforts to "fair-share" taskings across the Air Force have negatively impacted the team concept associated with standard UTC-based planning. Personnel became disconnected from UTCs designated for MTW OPLANs, without visibility to planning staffs. Development of the EAF concept highlighted this disconnect between UTC management and individual rotations, resulting in a significant reduction of PALACE Tenure taskings in late 1999. Unfortunately, these changes did not come soon enough. These disjointed processes severely complicated deployment planning for the Air War Over Serbia (AWOS), and would have significantly hampered a transition to JSCP-directed MTW plans.

Kosovo--Why the Air Force needs SIPES

One of the linchpins of a successful military deployment is detailed planning. In the case of force deployments, this planning takes the form of an accurate description of what units need to be moved, their points of origin, their destinations, their size, and when they are required to arrive. This basic information comprises the backbone of the Time-Phased Force and Deployment Data (TPFDD) that drives the allocation of transportation assets...to ensure that scarce mobility assets are used in the most efficient fashion.

Report to Congress, Kosovo/Operation Allied Force After-Action Report

The USAFE Air Operations Squadron (AOS) managed Air Force deployments/redeployments to operations in and around Bosnia. Initial TPFDDs for deployments in support of the Implementation Force (IFOR) were accomplished using established UTCs tailored to meet CINC requirements. However, UTCs were not always rotated as complete UTCs, and over time the Air Force evolved to the previously discussed PALACE Tenure individual rotation management program.

To support these rotations, management of UTCs was accomplished in coordination with MAJCOM planning staffs following AFMAN 10-401 procedures, while individual personnel rotation requirements were forwarded to AFPC for tasking as directed in AFI 10-215, Personnel support for contingency Operations. Over time, the USAFE AOS transitioned many UTC rotations to PALACE Tenure rotations. To manage PALACE Tenure, USAFE AOS utilized an Air Force specific manpower/personnel system to feed individual AFSC requirements to MAJCOMs via AFPC. As stated previously, only JOPES ADP represents the single vehicle that supports collaborative planning across all DoD agencies. Since existing Air Force specific manpower/personnel systems did not automatically update the DoD-wide JOPES ADP TPFDD database, the process required a separate manual update. This additional step to update JOPES ADP was critical to ensure CINC, Component, and TRANSCOM visibility to force movement. However, even with the best intentions, this step was often overlooked. The result was very limited visibility of deploying units at the CINC, AF Component, transportation agency, or Service headquarters level. To ensure visibility of planning across all levels, standard procedures must be rigidly adhered to, and JOPES ADP must be used to build a TPFDD.

Escalation toward Major Theater War

Operation ALLIED FORCE occurred as the Air Force was preparing to transition to a new Expeditionary Aerospace Force (EAF) concept. Under EAF, the Air Force will provide portions of two of ten Air Expeditionary Forces (AEFs) for existing rotational deployments. Residual forces in the two on-call AEFs, plus one of two existing On-Call Air Expeditionary Wings (AEWs), will remain available for pop-up humanitarian assistance or crisis response.²⁴

During Operation ALLIED FORCE, NATO required 214 combat aircraft, 112 of which were from the United States.²⁵ As the conflict grew, 563 USAF aircraft and 16,160 American

airmen were eventually deployed to twenty-five bases in support of the air campaign.²⁶ Establishing a combat capability at each of twenty-five bases required a tremendous planning effort. Since some of the beddown locations included former East European airfields never visited by USAF personnel, special ‘site survey’ teams were dispatched from USAFE to determine available resources that would not have to be deployed from the United States. This time-consuming effort significantly impacted the deployment schedule. Additionally, USAFE AOS was forced to develop initial support packages for bases with little knowledge of requirements or in-place resources. Sadly, with all the deployment experience of the United States Air Force, no template existed to assist this group’s initial effort. Only the tremendous effort of individuals within each functional support area ensured appropriate resources were included in deployment packages.

Throughout the operation, the USAFE AOS approach to TPFDD development was piecemeal. Each functional area was required to determine specific requirements and input them directly into JOPES, or provide details to the JOPES cell to input to the TPFDD. As a result, the TPFDD development of these packages included variations of standard UTCs, non-standard UTCs, and PALACE Tenure individual augmentees. Specifically, AWOS TPFDD data contained only twenty percent standard, non-tailored, UTCs. Forty percent of TPFDD data was either fabricated UTC or PALACE Tenure inputs. Difficulty differentiating the two requests for forces resulted in more than one dual tasking.²⁷ Finally, only forty percent of the TPFDD database consisted of adequately tailored UTCs.²⁸ With individuals deployed through two different tasking vehicles, MAJCOM/FOA/DRU planning staffs were severely challenged to determine missing capability from MTW planned requirements. Had a MTW erupted during ALLIED FORCE, the United States Air Force would have been extremely hard pressed to

identify available deployable force structure. At the very least, TPFDD build and closure times would have been significantly delayed. Consequently, operation ALLIED FORCE proved the requirement for a single integrated planning and execution system.

Notes

¹ Joint Staff Officers Guide, p. 6-13

² Joint Deployment Training Center Website. Available from
<http://www.jdtc.eustis.army.mil/>

³ Joint Publication 1-02, p. 414

⁴ Joint Publication 1-02, p. 415

⁵ Joint Publication 5-0, p. I-10

⁶ Joint Publication 5-0, p. I-10

⁷ Joint Staff Officers Guide, p. 6-20

⁸ Joint Publication 5-0, p. III-3

⁹ Joint Staff Officers Guide, p. 6-25

¹⁰ Joint Staff Officers Guide, p. 6-26

¹¹ Joint Staff Officers Guide, p. 6-26

¹² Joint Staff Officers Guide, p. 6-26

¹³ Armed Forces Staff College Website. Available from
<http://www.afsc.edu/jpoc/outreach.htm>

¹⁴ Air Force Manual 10-401. *Operation Plan and Concept Plan Development and Implementation*, 1 May 1998, p. 370

¹⁵ Joint Publication 1-02

¹⁶ Timeline based on authors' knowledge of TPFDD development to meet FY96 JSCP directed MTW planning scenario.

¹⁷ Joint Publication 5-0, p. I-11

¹⁸ Joint Publication 5-0, p. I-10

¹⁹ Joint Publication 5-0, p. I-10

²⁰ Joint Publication 5-0, p. I-9

²¹ Joint Publication 5-0, p. I-9

²² Air Force Manual 10-401, p. 43

²³ Air Force Instruction 10-215, *Personnel Support For Contingency Operations*, 1 May 1999, p. 34

²⁴ Air Force Instruction 10-400, *Aerospace Expeditionary Force Planning*, 1 December 1999, p. 7.

²⁵ Headquarters United States Air Force. Draft Initial Report. *The Air War over Serbia, Aerospace Power in Operation Allied Force*. Washington, D.C. 8 December 1999, p. 16

²⁶ Air War Over Serbia Initial Report (Draft), p. 16

²⁷ Personal experience working in the AF Crisis Action Team during OPERATION ALLIED FORCE. On numerous occasions UTC shortfall taskings were sent to MAJCOM planning staffs via the AF CAT, while the same tasking was duplicated in AF Manpower systems and PALACE Tenure requirements were tasked to (sometimes different) MAJCOM personnel (DP) staffs.

Notes

²⁸ TPFDD analysis completed by HQ USAF/XOPW and Synergy, Inc.

Part 3

Expeditionary Aerospace Force Planning

The United States must prepare to face a wider range of threats, emerging unpredictably, employing varying combinations of technology, and challenging us at varying levels.

—Joint Vision 2010

To meet the unpredictable threats of this century, the Air Force must move away from the cold war presentation of large forces designed to fight MTWs. To be expeditionary, Air Force forces must be task-organized and prepared to deploy rapidly, beddown efficiently, and integrate with other Air Force, Joint, or Coalition forces. To accomplish this smoothly requires an in-depth overhaul of the Air Force concept of deployment planning.

Today, the Air Force is ideally staged to conduct this in-depth overhaul of existing planning and execution systems. The Chairman of the Joint Chiefs of Staff (CJCS) has a stated goal of developing the first seven days of a crisis TPFDD within 72 hrs of NCA direction.¹ The commander of US Transportation Command has also expressed the importance of rapid development of crisis action TPFDDs.² To meet this goal, AF forces must be packaged into task-organized, capability-based, right-sized deployable elements. Fortunately (or not), our recent experience with multiple small-scale contingency and humanitarian deployments have provided templates for understanding the force composition required to support global engagement.

Additionally, Air Force doctrine presents the fundamentals of aerospace power and describes how we are organized to employ throughout the spectrum of conflict.³ Of critical importance to our emerging doctrine is the organization of forces as deployable elements to better support the fundamental contributions of aerospace power. With the emerging EAF concept, properly organized forces, represented as deployable UTCs, are the foundation for a single integrated planning and execution system.

The Road to True Collaborative Planning

To remain jointly engaged, the Air Force planning process should be mutually supportive across all Air Force and Joint levels, and must fully integrate with existing JOPES structure and guidance. Serious efforts must be made to improve Air Force crisis action planning procedures to ensure that AF Component planners are fully supported by appropriate Air Force agencies. Efforts must exploit the existing work and structured approach of deliberate planning, while leveraging evolutions in information technology to expedite the development of an executable course of action. Finally, these changes require organizational oversight to ensure system compatibility and adequate training and exercise of all systems and processes.

To meet the rapid planning and execution timelines required of an Expeditionary Aerospace Force, the Air Force must take positive actions to achieve the collaborative planning and execution system envisioned as far back as the mid-1960s. Three steps are critical to meeting this goal:

1. A formal effort must be initiated to redefine existing MTW sized Unit Type Codes (UTCs) to the scaleable, modular building blocks that support rotational contingencies, crisis action and deliberate planning.
2. Once resized, link UTCs together to form Force Modules representative of the contributions of aerospace power identified in Air Force Doctrine.
3. Continue ongoing efforts to develop the Deliberate Crisis Action Planning and Execution Segment (DCAPES) within the Global Command and Control System (GCCS). If given

proper emphasis and funding, this system has the potential to finally bring together the existing independent systems and provide detailed manpower and logistics data to planners at all levels to support CINC requirements.

User-friendly UTCs

The existing Air Force UTC construct supports the development of MTW Plan TPFDDs. This simple fact is a major contributor to difficulties experienced developing a TPFDD for less-than-MTW contingencies. World dynamics have driven the development of the EAF concept, and now demand a major overhaul of the Air Force planning process. The first step is to rewrite the UTC presentation of forces into scaleable, modular building blocks that facilitate rapid TPFDD development in support of small scale contingencies, MOOTW, or humanitarian relief operations, yet support the Defense Planning Guidance (DPG) requirement for MTW OPLANS.

Current UTC presentation for MTW supports the deployment of entire fighter squadrons (usually 18 or 24 aircraft) to deploy to an AOR and beddown with other squadrons from the same wing. This nearly replicates homestation organizational structure in the forward-deployed AOR. As an example, a typical F-16 squadron of 24 aircraft deploys with approximately 345 personnel (including pilots), and requires almost 240 short tons of equipment. Since combat support forces are aligned to support these fighter aircraft, the majority of support forces UTCs also accommodate large-force capabilities. However, a review of recent history shows deployments of less than complete squadrons of fighter aircraft.⁴ Therefore, to support rapid TPFDD development, UTCs should be constructed to support the deployment of less than squadron-sized force packages. When completed, maintenance and other combat support career fields can restructure UTCs that align to fighter packages.

Typical fighter wings have been manned and equipped to deploy as squadron-sized elements in support of MTW plans. However, simply transitioning to less than squadron sized UTCs will not allow a typical 24-aircraft squadron to deploy multiple packages to different locations. Fully

developing smaller UTCs could identify required manpower and equipment to enable a squadron to perform multiple deployments from within the same squadron (split operations), if that becomes a corporate Air Force decision. If so, clearly articulating smaller force packages (i.e., six-ship UTCs) provides a template for detailed programming to round out squadron capabilities.

During development of the ten AEFs, the Civil Engineer (CE) career field made a decision to restructure the CE UTCs to better accommodate deployments from multiple bases in support of AEF deployments. Prior to AEF development, the CE Prime BEEF lead team UTC consisted of 132 individuals and deployed with 12 Short Tons (24,000 lbs) of equipment. This UTC is postured in MTW OPLANs, but CE planners determined that recent global engagement deployments did not use entire Prime BEEF teams. Difficulties in the mechanics of tailoring large UTCs, and the inability to track unused force structure provided extra incentive for change. Further, while CE planners recognized that deploying portions of the large Prime BEEF UTC from multiple bases would avoid decimating CE capability at home bases, the mechanics of representing the single capability from multiple bases in a TPFDD required a great deal of effort. Rather than undertake this effort for each AEF rotation or pop-up contingency, CE developed scaleable, modular building block UTCs that can support existing deployments individually, or can be recombined to support MTW deliberate planning (See Figure 4).

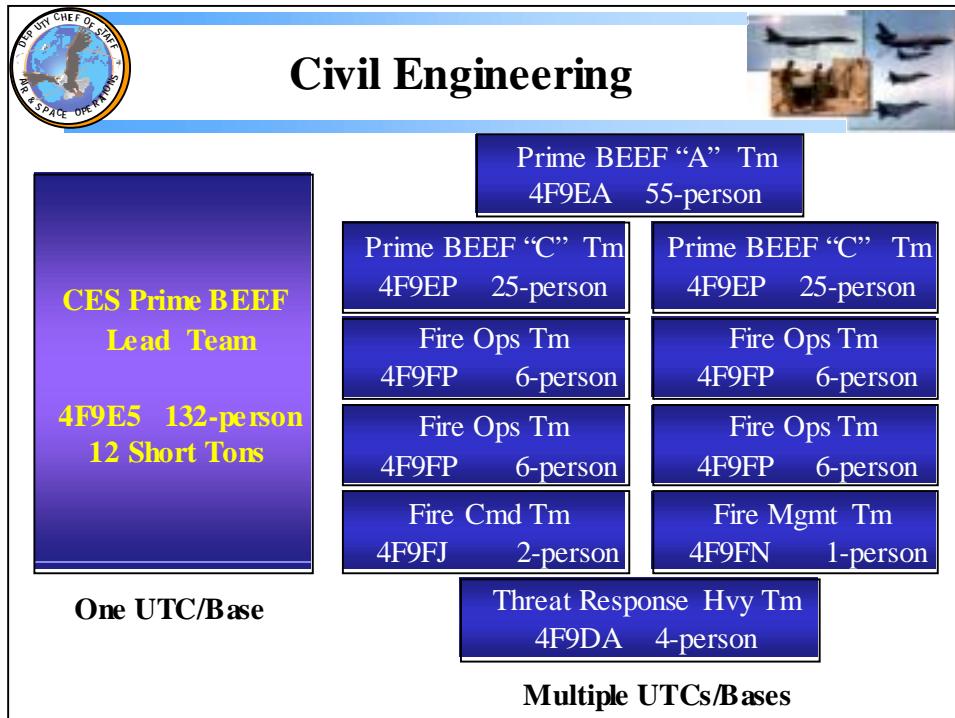


Figure 4. Civil Engineer UTC⁵

A modification to existing AF UTC structures would necessitate a complete overhaul of existing OPLAN TPFDDs. In my opinion, this is necessary even if doing so creates havoc within a system resistant to change. Disruptions to OPLANS could be minimized, however, if new UTCs were structured in the scaleable, modular building block approach.

Scaleable, modular building block UTCs provide Air Force deployment planners the flexibility to meet day-to-day rotations, transition to pop-up crisis, and support standard deliberate planning requirements. A UTC must be the smallest deployable force structure that represents a baseline capability. Entire units should be comprised of multiple iterations of the new standard UTC. UTCs must be structured as individually deployable for MOOTW operations, yet when combined, represent a building block approach toward meeting large MTW plan requirements. Each functional area should strive to develop UTCs that represent the smallest deployable capability required. However, this is not a recommendation to develop one

person UTCs. Most functional areas have a good idea what capabilities have been deploying to recent contingencies and rotations. If not, a review of the numerous short-notice deployments of recent years would serve as an excellent template in UTC development.

As a final consideration during the UTC restructuring process, Air Force planners should review the necessity for specific Designed Operational Capability (DOC) statements. AFI 10-201, Status of Resources and Training System (SORTS), directs that unit DOC statements provide specific measurement standards for unit readiness reporting.⁶ This includes listing specific OPLANs the unit is tasked to support. Historically, Unit DOC statements represent the MTW OPLAN to which the unit is apportioned. However, today's globally engaged Expeditionary Aerospace Force must be prepared to perform its mission with flexibility and versatility, and should be DOC-tasked accordingly. Development of generic DOC statements to support a units capability to deploy worldwide would better assist realistic Status of Resources and Training (SORTS) reporting. It is not unrealistic to assume MTW readiness in a unit reporting ready to perform its mission worldwide.

Link Capabilities to Doctrine

Once UTCs are developed that represent a core deployment capability, existing systems allow planners to link multiple UTCs into ready-to-use force modules within both Air Force and Joint ADP. These force modules (called Core UTC Packages in the Air Force system) contain collections of UTCs representing ready-to-deploy capabilities. These force modules can be developed and time-phased in peacetime to allow rapid TPFDD development during Crisis Action Planning. While every deployment has different requirements, having a template prepared in a compatible computer format will greatly assist planners in the difficult, time-consuming process of TPFDD development.

During peacetime, Air Force service planners should develop pre-designated force modules that represent doctrinally accepted capabilities. AFDD-2 describes how our Air Force organizes and *employs* aerospace power.⁷ Developing deployable force modules aligned to Air Force doctrine allows CINC planners to transition from force deployment requirements to force employment requirements. The peacetime development of capabilities based force modules representing “Crisis Response”, “Rescue/Noncombatant Evacuation Operations (NEO)”, “Deterrence”, “Humanitarian assistance”, and other aerospace contributions will provide timely, reliable transportation data (i.e., TPFDD) required by TRANSCOM to move forces.⁸ The key to supporting CINC planners in rapid TPFDD development is the peacetime efforts by Air Force planners to develop realistic force modules.

To increase flexibility within these force modules, aviation and support forces should be developed separately. Combat forces will either deploy to an existing base infrastructure, or will utilize a combination of host nation resources and deployed equipment to build a deployment location. Separating aviation capabilities from support capability increases planning flexibility by allowing any combination of aviation and support force modules. This “plug and plan” concept (figure 5) facilitates deployment planning regardless of weapon system. Further, support-only force modules may be developed to support humanitarian operations discussed in AFDD-2. To ensure linkage between combat forces and critical combat support (i.e. maintenance, munitions), each aviation force module must include airframe-specific combat support (i.e. maintenance). However, since combat service support forces such as Civil Engineering or Services are independent of weapon system, combat service support force modules can be developed independently.

Inherent Flexibility of Plug & Plan

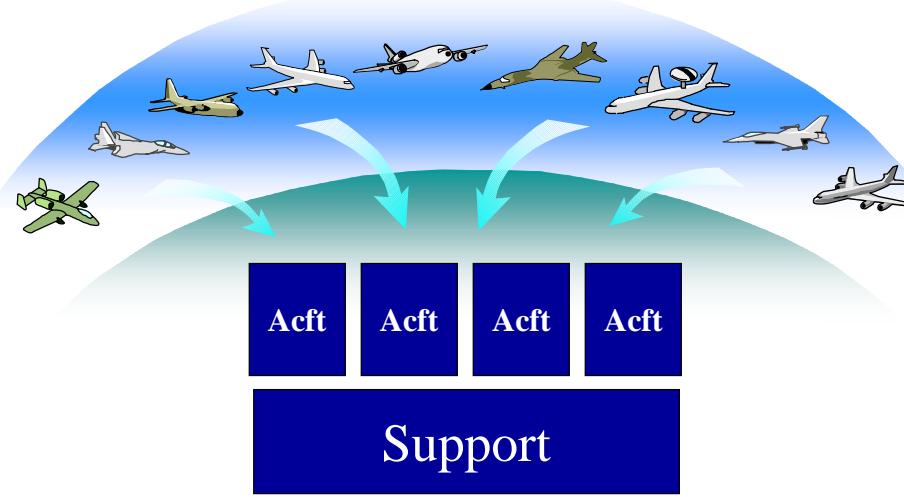


Figure 5. Plug and Plan Concept⁹

This ‘plug and plan’ concept is a fundamental element to the development of capability modules (Figure 6) representative of AFDD-2 identified tasks of aerospace power.¹⁰

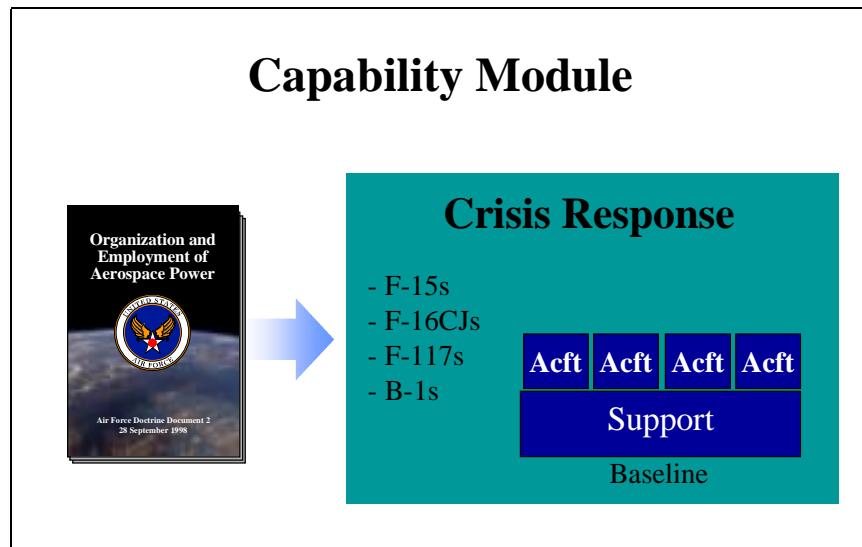


Figure 6. Representing Capabilities with Force Structure¹¹

The result of these peacetime efforts is on the shelf, ready-to-deploy Air Force capabilities aligned to existing doctrine. As is always the case, tailoring to specific requirements will be

necessary at execution, but overall visibility of available and deployed forces is greatly improved over existing practices. Further, using standard UTCs to develop force module capabilities facilitates the AEF rotational schedule inherent in the EAF. One TPFDD template can be developed using standard UTCs, then sourced (identify the unit to fill the requirement) across all AEFs with minor corrections. This will eliminate the current requirement to build a new TPFDD for each AEF rotation. Best of all, this organization of forces does not require changes to existing structures. Rather, existing organizations become better represented as pieces of the overall contribution.

Deliberate Crisis Action Planning and Execution Segment (DCAPES)

Budget realities will likely preclude the wholesale purchase or development of an entire new Air Force planning system. Therefore, the Air Force must fuse together access between JOPES in the Joint arena, and the multiple stove-piped Air Force specific manpower, personnel and logistical deployment databases. Only then will Air Force systems support true collaborative planning sought in the JOPES environment. Doing so will allow commanders the continuous ability to track deployments and assess impacts against capability to meet existing JSCP-directed plans.

Throughout the last 20 years, the Air Force has made occasional efforts to integrate the many single-purpose, stove-piped deployment systems utilized by various organizations at multiple levels. Recent emphasis to rapidly develop a TPFDD drove the Air Force to undertake another attempt. If adequately funded, the Deliberate Crisis Action Planning and Execution Segment (DCAPES) to the Global Command and Control System (GCCS) will enable timely, Air Force input to JOPES. DCAPES will support all levels of command, across the operational continuum using modern integrated tools, shared infrastructure, and common data consistent

with the Air Force C2 Vision.¹² The Air Force has already programmed over \$80 million over the next 5 years to support development of this system.

To fully support collaborative planning, DCAPES must have the ability to track individuals and equipment from home station through deployment. This includes in-transit visibility and registration of the individual/equipment at the deployed location. Further, the system must be flexible to operate throughout the spectrum of conflict. It must be tailorable to meet specific CINC requirements and responsive to ever changing planning considerations. Finally, DCAPES must be standards compliant, capable of coexisting with and leveraging established data systems.

Training

Today, JOPES ADP is a complex, non-user friendly system. In addition, the Air Force decision not to create a career field for JOPES ADP trained planners further complicates the issue. Today's experts, "JOPESters", are usually junior NCO's working outside their assigned career fields. Because the enlisted promotion system directs individuals to test within designated career fields, JOPESters tend to miss promotion opportunities. Yet, when a crisis occurs, trained JOPESters become very important individuals in a Crisis Action Cell. Unfortunately, it is only during crises that lack of planner training gets any visibility. During AWOS, USAFE AOS had to slow down TPFDD development in order to conduct JOPES training to the AOS staff and deployed augmentees.

The reality is that each future generation of planning systems will become more and more user-friendly in a "point and click" web-based environment. But that will not eliminate the requirement for trained individuals who understand specific functional areas and their interrelationship to support aerospace operations. Until JOPES ADP is as familiar as the point-

and-click architecture of the internet, trained JOPESters will remain a critical resource and should be treated as such.

Notes

¹ Joint Operation Planning and Execution System Strategic Plan, Director of Operations, J-3. February 2000, p. 5.

² Message. 021135Z Jun 99. HQ AMC Commander. To all MAJCOM Commanders, 2 Jun 1999.

³ AFDD-2, Forward

⁴ Knowledge obtained supporting the development of TPFDDs from HQ USAF/XOPW from 1997-1999

⁵ Slide from HQ USAF/ILEX briefing;, used with permission

⁶ AFI 10-215, p. 11

⁷ AFDD-2, Forward

⁸ AFDD-2, p. 12-16

⁹ Slide from HQ USAF/XOPW briefing in support of EAF Concept

¹⁰ AFDD-2, p. 12

¹¹ Slide from HQ USAF/XOPW briefing in support of EAF Concept

¹² Global Command and Control System, Deliberate Crisis Action Planning and Execution Segment (DCAPES). Website available from <http://jite.fhu.disa.mil/gccsio/dcapes.htm>

Part 4

Conclusions

Nothing succeeds in war except in consequence of a well prepared plan.

— Napoleon I, 1769-1821¹

The previous decade has seen a four-fold increase in the number of Air Force personnel deployed to commitments around the globe. Meanwhile, the Air Force has downsized by over 30%, with a two-thirds decrease in infrastructure.² With approximately 9,950 Air Force personnel and over 330 aircraft deployed today, we must find a better process to identify, prepare and deploy our forces while closely managing our ability to respond to additional NCA taskings.³

Completion of the actions discussed in this paper is a vital step toward the vision of a fully collaborative planning system originally discussed in 1966. This century begins with CINC Component planners continually challenged to identify requirements for numerous contingency operations, humanitarian relief, MOOTW, exercises, etc. These various operations place a heavy burden on service planners challenged to supply and track adequate forces from our deminished force structure.

Leadership

CINC and Service planners experience a tremendous amount of self-induced pain as each organization strives to fix what many describe as a broken process. However, as long as each

Headquarters directorate, MAJCOM, and CINC attempt to streamline, fix, or develop “work-arounds” to their own problems, we, as an Air Force, will be no closer to understanding the entire problem than we are today. The Air Force deployment process needs a single organization to ensure the standardization and integration of existing systems, and bring together all the good ideas toward improvement while stifling stove-piped arrangements. This organization must make every attempt to identify each of the many ongoing efforts to improve the deployment process, and bring them together in a coherent fashion that best supports the Air Force capability to deploy forces in a joint environment. In my observation, the organization best suited for this is HQ USAF/XO. The “War Dawgs” of HQ USAF/XOPW are the single agency for developing Air Force warplanning policies, registering UTCs, and apportioning forces to Theater CINCs for deliberate planning.

Accountability

The Air Force desperately needs a single agency/organization to monitor Service deployments to the many CINC commitments around the world. This agency should be the single entry point for all CINC requirements, from Deliberate Planning apportionment, to rotations and force requests for pop-up contingencies. This agency must work closely with all CINCs to monitor deployment impacts to MTW capabilities, while providing risk assessment to the CSAF. This will require timely coordination with CINC and Component planning staffs to ensure viable courses of action remain available to meet NCA objectives.

Development of the EAF concept included stand up of an AEF Center (AEFC) located at Langley AFB, and reporting directly to ACC/XO. This agency will serve as oversight authority for sourcing and scheduling of AEFs and on-call AEWs.⁴

In my opinion, the AEFC must address not only AEF rotations and crisis contingencies, but also the deliberate planning development of MTW TPFDDs. Not doing so threatens to institutionalize the difference between deliberate and crisis action planning, and clearly does not support the full spectrum of military operations. Second, to ensure the fair-share distribution of tasking, and eliminate disagreements that would adversely impact Air Force ability to respond to CINC requirements, the AEFC should be placed at a level above MAJCOMs/FOAs/DRUs. Current regulations direct the adjudication of unfulfilled or shortfalled requirements fall to the HQ USAF Crisis Action Team (AF/CAT) when activated, or HQ USAF/XOPW when the CAT is not activated. In my opinion, the AEFC should exist at the headquarters level, perhaps as part of the HQ USAF Operations Group and report directly to the CSAF. Finally, a properly trained staff of Air Force planners that understand the efficient, effective deployment of pre-packaged capabilities, will best support rapid TPFDD development to meet CINC timelines.

Immediate Actions

To demonstrate the importance of developing a more deployable Air Force posture, the CSAF must initiate an overhaul of the USAF UTC structure, focusing on developing realistic, deployable core capabilities. Each weapon system and functional area must develop the scaleable, modular, building block UTCs discussed in this paper. Only a coordinated, focused review of all UTCs during peacetime will ensure the Air Force is properly prepared to deploy to the next Air War. Based on my experience in coordinating this process, I believe this effort will require fifteen months from initiation to the final registering of properly sized UTCs.

Next, MAJCOM and Air Staff planners must use these new UTCs to develop force modules aligned to the Air Force capabilities stated in AFDD-2. These force modules should be time-phased according to priorities needed to ensure force protection, while rapidly preparing to begin

operations in the forward location. Force module development would begin toward the end of UTC reshaping, and could be accomplished within six months. To insure unity of effort, the process will require central oversight from the HQ USAF level and execution oversight by MAJCOM planning staffs.

Mid-Term Goals

While functional area managers and planners at all levels work toward development of deployable UTCs, planning agencies should continue toward the integration of currently stove-piped Air Force systems. Ongoing efforts to develop the Deliberate and Crisis Action Planning and Execution Segment (DCAPES) are imperative to break down barriers and better integrate existing manpower personnel and logistics systems. By December of 2000, The first phase of DCAPES will provide the foundation upon which the Air Force ADP system will more closely align to JOPES ADP.⁵ Today, current AF systems still lack a real-time ability to transfer data between and among Joint and Air Force systems.

The goal of the EAF is to present ten Air Expeditionary Forces (AEFs) of relative capability. Elements of each AEF will deploy in a rotational cycle to meet CINC deployment needs. This alignment provides for more equitable Air Force participation, while decreasing individual deployment requirements. However, during development of the ten AEFs, only deployable, registered UTCs within Air Force systems were utilized. At the time of initial AEF development, only 60% of the available Air Force personnel were aligned to UTCs.⁶ The additional 40% represent the homestation requirements needed to ensure force protection, engineering support, and minimal service support to the base and families during deployment. To completely capture all available personnel to deploy, efforts must be taken to include the

additional 40% of the Air Force in deployable UTCs. Once all potentially deployable personnel are represented in UTCs, the ten AEFs can be more equally balanced.

Long-Term Vision

The USAF must make the commitment now and allocate the resources necessary to attain the 35-year-old goal of developing a single, standardized, collaborative planning and execution system. This system must enable development of realistic deployable force packages to meet National Command Authorities directives. This paper discussed actions that will move the Air Force planning system closer to that goal. Ultimately, the Air Force deployment process must provide real-time visibility of all deployable personnel and equipment throughout all phases of preparation, deployment, and redeployment.

Finally, like all large undertakings, the above stated actions cannot happen without demonstrated support from senior leadership. The Air Force was bold and decisive in the development of the EAF structure, but we must accept that the race toward an Expeditionary Aerospace Force is a marathon, and we are approaching the next hill in the road.

Notes

¹ Joint Publication 3-0, *Doctrine for Joint Operations*. Joint Chiefs of Staff, Washington, D.C. United States Government Printing Office, 1 February 1995, p. III-1

² HQ USAF EAF Implementation Division (AF/XOPE) EAF briefing September 1999

³ Numbers as of 10 March, 2000, provided by HQ USAF/XOPW from daily deployment reports

⁴ AFI 10-400, p. 15

⁵ Telephone conversation with HQ USAF/XOPW Division Chief, Col Bob McHale

⁶ Figures obtained from CSAF Readiness briefing provided by HQ USAF Readiness Division (AF/XOOA)

Glossary

ACC	Air Combat Command
ACSC	Air Command and Staff College
ADP	Automated Data Processing
AEF	Aerospace Expeditionary Force
AEFC	Aerospace Expeditionary Force Center
AEW	Aerospace Expeditionary Wing
AF	Air Force
AFDD	Air Force Doctrine Document
AFI	Air Force Instruction
AFMAN	Air Force Manual
AFPC	Air Force Personnel Center
AFSC	Air Force Specialty Code
AMC	Air Mobility Command
AOS	Air Operations Squadron
AWOS	Air War Over Serbia
CAP	Crisis Action Planning
CINC	Commander in Chief
CJCS	Chairman, Joint Chiefs of Staff
COA	Course of Action
COMPES	Contingency Operation/Mobility Planning and Execution System
CONPLAN	Operation plan in concept format
CSAF	Chief of Staff, US Air Force
DCAPES	Deliberate and Crisis Action Planning and Execution Segments
DOC	Designed Operational Capability
DOD/DoD	Department of Defense
DPG	Defense Planning Guidance
DRU	Direct Reporting Unit
EAF	Expeditionary Aerospace Force
EKB	Employment Knowledge Base
FOA	Field Operating Agency
IFOR	Implementation Force
JCS	Joint Chiefs of Staff

JDS	Joint Deployment System
JOPES	Joint Operation Planning and Execution System
JOPS	Joint Operation Planning System
JPEC	Joint Planning and Execution Community
JSCP	Joint Strategic Capabilities Plan
JSPS	Joint Strategic Planning System
MAJCOM	Major Command
MOOTW	Military Operations Other Than War
MTW	Major Theater War (formerly Major Regional Contingency)
NATO	North Atlantic Treaty Organization
NCA	National Command Authorities
NMS	National Military Strategy
NSN	National stock number
OPLAN	Operations Plan
OPORD	Operations Order
POD	Port of Debarkation
POE	Port of Embarkation
SIPES	Single Integrated Planning and Execution System
SORTS	Status of Resources and Training System
TPFDD	Time-Phased Force and Deployment Data
TRANSCOM	United States Transportation Command
UIC	Unit Identification Code
ULN	Unit Line Number
UTC	Unit Type Code
USAF	United States Air Force
USAFE	United States Air Force Europe
WMP	War and Mobilization Plan

Terms

Assigned. Those forces and resources in being that have been placed under the combatant command (command authority) of a unified commander by the Secretary of Defense in his “Forces for Unified Commands” memorandum.

Apportioned. Apportioned forces and resources are assumed to be available for deliberate planning as of a specified date. They may include assigned, those expected throughout mobilization, and those programmed. They are apportioned by the JSCP for use in developing deliberate plans and may be more or less than the forces actually allocated for execution planning

Allocated. Those forces and resources provided by the NCA for execution planning or actual implementation. The allocation of forces and resources is accomplished through procedures established for crisis action planning.

Contingency Operation/Mobility Planning And Execution System (COMPES). The Air Force standard automated dataprocessing subsystem of the Joint Operation Planning and Execution System (JOPES), which is used by operations, logistics, and manpower/personnel planners at all command levels to develop and maintain force packages and task requirements for operation plan Time-Phased Force and Deployment Data (AFM 11-1).

Contingency. An emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid response, and special procedures to ensure the safety and readiness of personnel, installations and equipment (Joint Publication 1-02).

Deliberate and Crisis Action Planning and Execution Segments (DCAPES). An in development Air Force planning system that will reside on the Global Command and Control System (GCCS). DCAPES will enable timely, Air Force participation in the Joint Operations Planning and Execution process. DCAPES supports all levels of command, across the operational continuum using modern integrated tools, shared infrastructure, and common data consistent with the Air Force C2 Vision.

Designed Operational Capability Statement (DOC). DOC Statements provide units with their unit specific SORTS measurement criteria. CJCS SORTS policy requires the unit overall C-level to be based on the full wartime mission(s), primary aircraft authorization (PAA), UTC taskings, etc.

Execution Planning. The phase of the Joint Operation Planning and Execution System crisis action planning process that provides for the translation of an approved course of action into an executable plan of action through the preparation of a complete operation plan or order. Execution planning is detailed planning for the commitment of specified forces and resources. During crisis action planning, an approved operation plan or other NCA-approved course of action is adjusted, refined, and translated into an operation order. Execution planning can proceed on the basis of prior deliberate planning, or it can take place in the absence of prior planning.

Force Module. A grouping of combat, combat support, and combat service support forces, with or without appropriate non-unit-related personnel and supplies. The elements of force modules are linked together or uniquely identified so that they may be extracted from or adjusted as an entity in the planning and execution databases to enhance flexibility and usefulness of the operation plan during a crisis.

Joint Operation Planning and Execution System (JOPES). A continuously evolving system that is being developed through the integration and enhancement of earlier planning and execution systems: JOPS and JDS. It provides the foundation for conventional command and control by national- and theater-level commanders and their staffs. It is designed to satisfy their information needs in the conduct of joint planning and operations. JOPES includes joint operation planning policies, procedures, and reporting structures supported by communications and ADP systems. JOPES is used to monitor, plan, and execute mobilization, deployment, employment, and sustainment activities associated with joint operations.

Logistics Module to the Contingency Operations/Mobility Planning and Execution System (LOGMOD). Used by logistics planners to identify equipment requirements and source them across MAJCOMs.

Manpower And Equipment Force Packaging System (MEFPAK). A data system designed to support contingency and general war planning with predefined standardized manpower and equipment force packages. MEFPAK, which operates in the command and control environment, is composed of two subsystems: the Manpower Force Packaging System (MANFOR) and the Logistics Force Packaging System (LOGFOR) (AFM 11-1).

Manpower Force Packaging System (MANFOR). The MANFOR is a subsystem of the MEFPAK. It provides the title of the unit or force element and its unique Joint Chiefs of Staff unit type code, capability statement that contains the definition of unit capability, manpower detail by function, grade (officers only), and Air Force specialty code required to meet the defined capability (AFI 10-403).

Manpower and Personnel module to the Contingency Operations/Mobility Planning and Execution System (COMPES) (MANPER). An Air Force specific system used to develop manpower requirements, and identify personnel to meet them.

Operation Order. As applied in this document, an order prepared by the supported commander to implement the National Command Authorities decision for the execution of an operation.

Operation Plan. Any plan, except for the Single Integrated Operational Plan (SIOP), for the conduct of military operations. Plans are prepared by Combatant Commanders in response to requirements established by the Chairman of the Joint Chiefs of Staff and by commanders of subordinate commands in response to requirements tasked by the establishing unified commander. Operation plans (OPLANs) are prepared either in the complete format of an OPLAN or as a concept plan (CONPLAN).

a. **OPLAN.** An operation plan for the conduct of joint operations that can be used as a basis for development of an operation order. An OPLAN identifies the forces and supplies required to execute the combatant commander's Strategic Concept and a movement schedule of these resources to the theater of operations. The forces and supplies are identified in time-phased force and deployment data (TPFDD) files. OPLANs will include all phases of the tasked operation. The plan is prepared with the appropriate annexes, appendixes, and TPFDD files as described in the JOPES manuals containing planning policies, procedures, and formats.

b. **CONPLAN.** An operation plan in an abbreviated format that would require considerable expansion or alteration to convert it into an OPLAN or OPORD. A CONPLAN contains the combatant commander's Strategic Concept and those annexes and appendixes deemed necessary to complete planning. Generally, detailed support requirements are not calculated and TPFDD files may or may not be prepared.

Port of embarkation (POE). The geographic point in a routing scheme from which cargo or personnel depart. May be a seaport or aerial port from which personnel and equipment flow to port of debarkation. For unit and nonunit requirements, it may or may not coincide with the origin.

Port of debarkation (POD). The geographic point at which cargo or personnel are discharged. May be a seaport or aerial port of debarkation. For unit requirements, it may or may not coincide with the destination.

Short Ton. A short ton is equal to 2,000 lbs.

Status of Resources And Training System (SORTS). A JCS-controlled, automated data system primarily created to provide the NCA and JCS with authoritative identification, location, and resource information. It is used throughout the chain of command to measure the daily resource status of operating forces.

Split Operations. Deploying a single operational fighter squadron to two or more locations.

Supported Commander. The commander having primary responsibility for all aspects of a task assigned in the Joint Strategic Capabilities Plan or other joint operation planning authority. In the context of joint operation planning, this term refers to the commander who prepares operation plans or orders in response to requirements of the Chairman of the Joint Chiefs of Staff.

Support Forces. Non-Aviation forces such as those contained in the USAF War and Mobilization Plan, Volume 3, Part 2, which normally operate in a combat area and must maintain a deployment capability.

Supporting Commander. A commander who provides augmentation forces or other support to a supported commander or who develops a supporting plan. Includes the designated combatant commands and Defense agencies, as appropriate.

Time-Phased Force and Deployment Data (TPFDD). The JOPES data base portion of an operation plan; it contains time-phased force data, non-unit-related cargo and personnel data, and movement data for the operation plan, including:

- a. In-place units.
- b. Units to be deployed to support the operation plan with a priority indicating the desired sequence for their arrival at the port of debarkation.
- c. Routing of forces to be deployed.
- d. Movement data associated with deploying forces.
- e. Estimates of non-unit-related cargo and personnel movements to be conducted concurrently with the deployment of forces.
- f. Estimate of transportation requirements that must be fulfilled by common-user lift resources as well as those requirements that can be fulfilled by assigned or attached transportation resources.

Tailoring. Any change to manpower requirements in the OPLAN (TPFDD or DRMD) as stated by the supported Air Force Component Commander.

Unit Identification Code. A six-character, alphanumeric code that uniquely identifies each Active, Reserve, and National Guard unit of the Armed Forces. (Joint Pub 1-02)

Unit Type Code (UTC). A five-character, alphanumeric code that uniquely identifies each type unit of the Armed Forces. (Joint Pub 1-02)

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